OSHA-81-034-GB
0 SHRB Docket No. 106

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STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE MINNESOTA OCCUPATIONAL SAFETY AND HEALTH REVIEW BOARD

In the Matter of Harry D. Peterson,
Commissioner, Department of Labor
and Industry, State of Minnesota,

Complainant,

VS.

Congra Inc. ,

Respondent.

FINDINGS OF FACT,
CONCLUSIONS OF LAW
AND CIDER

The above-entitled matter came on for hearing before State Hearing Examiner George A. Beck at 9:30 a.m. on Thursday, May 7, 1981 in Room 552 of the Space Center Building, 444 Lafayette Road, Saint Paul, Minnesota. The hearing continued to the following day. Briefs were submitted by the parties, the last of which was received on July 15, 1981, and the record closed on that date.

Steven M. Gunn, Special Assistant Attorney General, Fifth Floor, Space Center Building 444 Lafayette Road, Saint Paul, Minnesota 55101, appeared on behalf of the Complainant- Dean G. Kratz, Esq. , of the firm of McGrath, North, O'Malley & Kratz, 300 Continental Building, Omaha, Nebraska 68102, appeared on behalf of the Respondent.

The following witnesses testified at the hearing: Harvey Wickman, Senior Occupational Safety and Health Investigator, Dapartment of Labor and Industry; Irvin Buchholz, Plant Manager, and Wayne Bellinger, Corporate Safety Director, ConAgra, Inc.

Notice is hereby given, pursuant to Minn. Stat. 182.664, subd. 5 (1980), that the Findings of Fact and Order of the Hearing Examiner may be appealed to the Minnesota Occupational Safety and Health Review Board by the employer,

employee or their authorized representatives within 30 days following the publication of said Findings and Order.

STATEMENT OF ISSUES

The issues in this proceeding are whether or not the Respondent has violated OSHA standards relating to a facility, for quick drenching or flushing of the eyes, relating to the operation of its manlift, relating to its electrical equipment, relating to the provision of proper guardrails on metal bins, and whether or not the penalties proposed for the alleged violations are proper.

Based upon all of the proceedings herein, the Hearing Examiner makes the following:

FINDINGS OF FACT

1. On November 27, .1979, Harvey Wickman, a Senior Occupational Safety and Health Investigator for the State of Minnesota, inspected the Respondent's workplace located at 309 West Stanton, Fergus Falls, Minnesota. The Respondent operates a grain-handling and flour manufacturing facility and employs approximately, 25 or 30 people at that location. (T. A11) Wickman was accounpanied on his inspection by Irvin Buchholz, the plant manager, and a representative of the employees' union. (T. A12) The inspection lasted two days. (T. A13)

2. The Respondent's facility consists, in part, of a grain receiving area where the grain is dumpd and then moved by belts called legs to storage in steel or concrete bins. (T. A15-17) The grain is then moved from the bins for use as needed in the flour mill operation of the facility which consists of roller mills, sifters, cleaners, legs and a horizontal auger (T. A17) The Respondent uses four cyclone cleaners in -the mill operation and maintains a daily 'housekeeping program for sweeping and cleaning up grain dust and flour dust. (T. A18; B53-54) The facility experiences two or three spills of wheat in the elevator each year. (T. B5 8) Spills can happen throughout the ele-- vator and mill. Two employees called sweepers work full-time to clean up dust and spills. Other employees work part-time on cleaning. ('T. B64) There was and normally, is a light dust located on equipment throuhout the mill area of

the facility but there was no dust suspended in the air. (T. A.17; B55, 57)

Clain and flour dust is a normal part of the operation of an elevator and flour mill. (T. B6 7)

3 . As a result of this inspection, the Complainant issued two citations to the Respondent on December 11, 1979 Ile first citation alleged 11 non serious violations of OSH standards. The second citation alleged eight seri- ous violations of standards, statutes and rules. By a letter dated December 28, 1979, the Respondent gave notice to the Complainant that it wished to con- test Citation No. 1, Items 1, 2, 4, 5, 6, 7 and 11, and Citation No. 2, Items tbs. 1 through 8.

4. (Xi January 28, 1980 the Complainant issued a Summons and Notice to Respondent and Complaint upon the Respondent. The Complaint alleged penalties as follows:

Citation No.	Item No.	Proposed Penaltv
1	4	72.00
1	5	72.00
1	11	7 2.00
2	1	48.00
2	2	192.00
2	3	144.00
2	4	10 8.00
2	5	108.00
2	6	60.00
2	7	108 00
2	8	144.00

The Respondent filed its Answer with the 0SH Review Board on February 1, 1980. (An December 8, 1980, the OSH Review Board issued a Notice of Hearing setting this matter on for hearing on March 12, 1981. ThE hearing was later continued to May 7, 1981. The Respondent Filed a Certificate of Service of the Notice of Hearing on affected employees with the OSH Review Board on December 12, 1980.

5. At the commencement of the hearing, the Complainant moved to dismiss Citation No. 1, Item No. 1, and Citation No. 2, Item No. 4, including its pro, posed penalty. Additionally, the Complainant moved to combine Items Nos. 4 and 11 of Citation No. 1, thereby withdrawing the proposed penalty for Item No. 11 and enforcing the standard cited in Item No. 4. Ile Complainant also roved to combine Items Nos. 2 and 7 of Citation no. 2 so as to withdraw the proposed penalty for Item No. 7 and enforce the standard cited in Item No. 2.

The Motions were granted. During the hearing, the Complaiant also moved to dismiss Item No. 8 of Citation No. 2 and the proposed penalty and the motion was granted. (T. B17)

Citation No. 1, Item NO. 2.

6. In its Citation, the Complainant alleged at violation of 29 C.F.R. 1910. 151(c) and described the violation as follows:

> Failure to provide suitable facilities for quick drenching or flushing of the eyes for immediate emeergncy use in the lab. (Ex. 1)

7. The Respondent maintains a small laboratory in its facility in a room which is approximately 2 6'x2 6' (T. B3 6) The lab is used for testing wheat and flour samples. Caustic soda and sulphuric acid are used in the lab to check the protein content of wheat. and flour. (T. B3 8) One lab technician works in the room. (T. B36) The lab contains a small sink and a pullchain type shower kith is located approximately seven feet above the floor. (T. A2 3; Ex . C) The room also contains an emergency eye-wash station which consists of a plastic squeeze bottle of buffer solution which is attached to the %,,all together with instructions on its use. (T . A2 3, Ex A) The buffer solution neutralizes acid or base. The bottle was approximately seven eighths full. (T. B3 7) The shower and the squeeze bottle were installed in 1973. (T. B38) The room did not contain an emergency basin-type eye wash. (T. A23)

8. Mr. Wickman issued the citation because the believed that if an em ployee had corrosive material in his eyes, the shower would only push the material into the eyes rather than wash it out. Mr. Wickman concluded that the eye wash bottle did not provide enough fluid for an adequate eye wash since a 15-minute supply of water is recommended. (T. A24) A suitable fa- cility for quick drenching of the eyes would include a basin-type device which projects a stream of water upward into the side of each eye as the employee holds his bead down over the device with tne water f low being controlled by a foot valve. An alternative is a hose which can be attached to a sink with a special shower-head which reduces the pressure. (T. A25)

9. The Manufacturing Chemists Association recommends that if even small amounts of sulfuric acid enters the eyes, that the eyes be, irrigated immedi- ately with large amounts of water for a minimum of 15 minutes. (Ex. 5;

T. B14 2) The National- Safety Council's "Fundamentals of Industrial Hygiene" recommends thorough flushing of the eyes with copius amounts of water and states that neutralizing agents should not be used since they may- increase eye damage. xs. 6, 7; T. B144)

Citation No. 1, Items No. 4 and 11

10. Citation No. .1 Item No. 4, alleged a violation of Article 502-4(b) (2) of the National. Electrical Code which is incorporated into 29 C.F. R. 1910.309(a) . The citation described the violation as follows:

> Foiled to provide flexible conduit that was not broken and with approved termination fittings for Class II, Division 2, areas as follows:
>
> (a) broken conduit on the blower motor located in the packing room
>
> (b) broken flexible conduit and non-approved termination fittings on the patient (sic) flour scale motor located on the sifter floor
>
> broken metal flexible conduit and non-approved termination fittings for the conduit on the patient (sic) flour scale motor located (on the third floor of the mill.

Citation No. . 1, Item No. 11 described the violation as follcws:

> Failed to provide flexible conduit that was not damaged, as follows:
>
> (a) conduit was broken back of the termination fitting on the power shovel motor located in the elevator scale room
>
> (b) flexible conduit was broken back of the termination fitting on the auger drive motor located in the basement of the elevator.

11. At the time of the inspection, a flexible conduit which covered electrical wires coming into the blower motor located in the packing room was broken just behind the packing nut for the termination fitting. (T. A46, 75) Flexible conduit is a metal tubing capable of bending which houses electrical wiring and can be employed around corners or short bends. Some conduit has a rubber insulation inside the metal casing (T. A73;, Ex. D) and same conduit has a plastic coating on the outside of the metal casing. (D., . E, T. A7 4, B4 3) On e purpose of The conduit is to keep dust from contact with the electrical wiring. (T. A4 5-46) Unless the insulation was also broken, dust would not come in contact with the wiring. (T. B41) The insulation under the conduit cited was not broken, however. (T. A85-86) Should dust enter the conduit but

not the insulation, it may prevent 'heat from the wiring from dissipating. (T. A104, B69) There was approximately one-half inch of dust on top of the junction box of the blower motor in the packing room. The junction box is located on the back side of the motor where the wires exit from the motor and joins the electrical service coming into the motor. (T. A46-47)

12. On the sifter floor of the mill, there was a broken flexible conduit and non approved termination fittings which were not dust right on the patent flour scale motor. The insulation inside the conduit was not broken. (T. B43) There was a light film of dust on the floor but no concentrations in the air. (T. A4 7)

13. There was also a broken metal flexible conduit with a non-approved, not dust-tight, termination fitting on the patent flour scale motor located on the third floor of the mill. (T. A47) The insulation inside the conduit was not broken. (T. B43)

14. There is a power shovel motor located in the elevator scale room of the Respondent's facility. The flexible conduit attached to the motor was broken just back of the termination fitting. (T. A48, A83, B46) The insulation under the conduit cited was not broken, however. (T. AB 5-8 6)

15. There was also a broken flexible conduit on the auger drive motor located in the basement of the elevator. The conduit was broken back of the termination fitting and was not dust-tight. (T. A4 8, B4 7) The insulation under the conduit cited was not broken, however. (T. A85 86) There was a concentration of dust in the air at the time of the inspection due to a spill from one of the spouts. (T. A5 0, B5 9) The broken conduit can be fixed by replacing it or shortening it up to eliminate the broken portion. (T. A4 9)

16. The unadjusted penalty for any particular violation is calculated by rating the hazard on the scale of A to F for severity, and by a consideration ,of the probability of an accident by an examination of six factors. The investigator assigns points for probability in the following six areas: He considers first, whether or not there is employee exposure to the hazard; second,

he considers Eve proximity of the employee to the hazard; third, he rates the duration of the hazard; fourth, he rates the working conditions of the facility-, fifth he rates the type of injury, and last, he assigns a number for employee control which means whether or not the employee contributed to the unsafe working condition. (T. B20, 23) The maximum probability points are

ten. The severity rating (e.g., C = $40) is then multiplied by the proba - bility rating to get the unadjusted penalty.

17. All of the unadjusted penalties proposed in the two citations at issue were reduced for credit given for the factors of good faith, size and history of the Respondent. The investigator gave the Respondent a maximum of 30% reduction for good faith since they have a safety program and are active in safety matters concerning their employees and enforce safety rules. Be- cause Conagra has more than 100 employees, the investigator gave no reduction in the penalties for the size of the company The Respondent was alloted the maximum 10% for past history. All of the penalties were then reduced by 40%. (T. B18)

18. In calculating the penalty for Item ND. 4 of Citation No. 1, the severity was rated at C by the investigator since a potential injury would result in some lost time or perhaps doctors' treatment. The probability was rated at a 3 since the investigator scored points in the area of employee ex- posure, proximity of the hazard and employee control. The C rating is as- signed a $40.00 penalty which is then multiplied by the 3 rating for an unad- justed penalty of $l2O.OO. (T. B2 0-21) The 40% credit for good faith and history leaves a $72.00 penalty proposed for this item. (T. B22)

Ci tat ion No. 2, Items Nos. 2 and 7

19. This portion of the citation alleges a violation of the National

Electrical Code, Article 502-4(b) (1) , which is incorporated into 29 C.F.R.

1910.309(a) The citation alleged that the standard was violated as follows:

> Failed to provide junction boxes that are approved for class II, Division 2, areas as follows:
>
> (a) junction boxes for lights located in the packing room
>
> (b) non-approved junction 'box located on the north wall of the packing room
>
> (c) no cover on the junction box for the filter motor located on the west side of the fifth floor of the cleaning house

(d) non-approved junction boxes for ceiling lights located on the 5th floor of the cleaning house

(e) norraproved junction boxes for the ceiling lights located on the f if th floor of the mill

(f) non-approved junction boxes for ceiling lights located on the fourth floor of the mill

(g) twelve non-approved junction boxes for ceiling lights lo-catted on the third floor of the mill

(h) twenty-two non-approved junction boxes for ceiling lights located on the second floor of the mill

(i) non-approved junction boxes for lights located in the galley at the top of the metal bins

(j) non-approved junction taxes for lights located at the top of the elevator

(k) elevator driveway dump area (3 non-aproved junction boxes located on the wall)

Failed to provide junction boxes that are approved for Class II, Division 1, areas as follows:

(a) non-aproved junction boxes for ceiling lights located in the west tunnel below the steel bins.

(b) non-approved junction boxes for ceiling lights located in the basement of the elevator.

20 CY the date of the inspection, the junction boxes for lights located

in the packing room were not dust-tight. (Exs. F, G; T. B103) A junction box

is the enclosure through which the wiring passes Defore proceeding through

conduit to a light fixture. Some junction boxes would not contain joints or

terminal connections. The investigator did not open the junction boxes to

examine them. (T. A91-92) If a junction box is properly wired and maintained

it would not normally produce sparks. (T. A.100-101, B92) 'Tne junction boxes

cited were not dust-tight in that they had knockouts on the sides; they bad

open screw holes, and they did not have threaded 'bosses. (T. A51) A knockout

is a metal disc in die junction box which can easily be knocked out with a

screw driver to permit the entrance of rigid conduit. (T. A52) If the knock-

outs are in tact, however, dust cannot enter through them. (T. A95-96 A

threaded boss is an opening on the side of the junction box with threads which

permits the conduit to be screwed into The junction box so as to keep it

dust-tight. (T. A53) The junction boxes in the packing room had no threaded

boss. Instead, the conduit entered the junction box through a knockout and 'held with a nut on each side of the junction box. (T. A54)

21. Another junction box on the north wall of the packing room was not dust-tight in that it had knockouts and screw opening consisting of an elongated slot which would leave a hole even though the screw is tightened. (T. A55-56; Ex. H) Ihe junction box also lacked a threaded boss. (T. A5 5) There was some dust located on the motor in the packing room and some dust on one junction 'boxes on the wall. (T. A54)

22. A. junction box for the filter motor which is located on the west side of the fifth floor of tie cleaning louse was missing a cover. The wiring, which was connected with plastic screw caps was sticking out of the junction box. (T. A56) The motor was being repaired aim The time of the inspection. (T. B52) The cleaning house is located in the mill area. (T. A56)

23. The junction boxes for the ceiling lights located on the fifth floor of the cleaning house were not dust-tight in that they lacked threaded bosses, had knockouts on the sides of the box, and open screw holes on the face plate. (I'. A57)

24. The ceiling lights located on the fifth floor of the flour mill had junction boxes which were not dust-tight in that they lacked threaded bosses, had knockouts and screw holes in the face plate. (T. A57--58) There were no concentrations of dust in the air. However, light dust had accumlated throughout. the mill. (T. A58)

25. The junction boxes for the ceiling lights located on the fourth floor of tne flour mill were not dust-tight in that they had conduits fastened with a nut instead of threaded bosses; there were knockouts in the junction box and screw holes in the face plate. Knockouts can be easily removed and are often either loose or knocked out altogether. (T. A58; Ex. I)

26. On the third floor of the flour mill, 12 of the junction boxes for the ceiling lights were not dust-tight in that the),, contained knockouts, did not have Threaded bosses, and had screw holes in the face plate. (T. A59)

27. CY the second floor of the flour mill, there were 22 junction boxes

for ceiling lights which were not dust-tight in that they did riot have
threaded bosses, had knockouts and contained screw holes in the face plate.
An employee works one-half to three-quarters Tours per day in the area of
these ligbts. (T. A5 9)

28. Five junction boxes for ceiling lights located in the gallery at the top of the metal bins were not dust-tight in that they had holes in the face plate, no threaded bosses, and knockouts. Me gallery is the metal enclosure at the top of the bins which houses the horizontal auger which transfers grain through spouts down into the metal bins. There was light dust in this area. (T. A60)

29. In the headhouse located at the top of the elevator, there are five lights with junction boxes which are not dust-tight in that they had holes in the face plate, no threaded bosses, and contained knockouts. The headhouse contains the top of the legs and pulleys. (T. A60-61)

30. The elevator driveway dump area, which is the receiving area where the grain is dumped into floor grates from trucks, contained three junction 'boxes on the walls which were not dust-tight in that they did not have threaded bosses, had knockouts and had holes in the face plate. One employee works in this area one to two hours per day. 'Ihere was a light concentration of grain dust. (T. A61)

31. In the west tunnel below the steel bins, the ceiling lights lacked dust-tight junction boxes. 'The junction boxes had knockout, and holes in the face plates and did not have screw connectors for the conduit. The west tun- nel connects to the basement of the elevator and contains a -horizontal auger- for the transfer of grain. Me area is adjacent to an area where a spill had been observed However, the area itself was fairly clean (T. A6 2)

32. In the basement of the elevator, there were six ceiling lights that had junction boxes which had knockouts with no threaded bosses and screw holes in the face plate. On the day of the inspection, there was a spill of grain from one of the spouts in the basement of the elevator. Tne closest junction box to the spill was eight feet away and the farthest one was 20 feet. (T. ES 9)

33. All except two of the junction boxes areas cited in Items 2 and 7 involved ceiling locations. In the packing room, the ceiling is 25 to 30 feet high and in the -flour mill, the ceilings range from 12 to 20 feet. (T. B4 9)

The screw holes in the junction boxes on the ceiling face downward. (T. B49)

34. A penalty was proposed for Item No. 2 of Citation No. 2. The investigator rated the severity, at E since he concluded that an accident would be rather severe in that a fire or explosion could result in second or

third-degree bur-ns and a possible death The investigator assigned a rating

of 4 for Frobability by assigning three points for employee exposure, prox-

imity to the 'hazard, and employee contxol. Et assigned a fourth point because

there were 11 instances of the violation. (T. E26) Since an E rating trans-

lates to tBO.00, the resulting unadjusted penalty was $32(D.00. 'Ihe applica-

tion of the 40% credit resulted in a Froposed penalty of tl92.00.

Citation N:). 2, Item No. 3.

3 5. C',ltation NC). 2, Item No. 3, alleges a violation of the 1971 National

Electrical- C05e at" Article 502-13(b) as it is incorporated into 29 C.F.R.

1910.309(a) - The citation described the alleged violation as follows:

> Fliled to r-rovide receptacles and attachment plugs that are aF-proved for C3-ass II, Division 2, areas as follows:
>
> (a) two-plex receptacle located on the south wall of the packing room
>
> (b) attachment plug for the electric chain hoist: located on the f if th floor of the mill
>
> (c) two-plex outlet located on the south wall of the roll floor
>
> (d) no@apr-roved attachment plug for the moisture tester loca te d o n th e sou th wal 1 o f th e rol 1 f loor
>
> (e) non-apfroved attachment plug for the sifter located by the south wall of the roll floor.

36. CZ the south wall of the packing room, directly below a junction box
and light, is a two-plex electrical outlet or receptacle. The receptacle had
a spria,4cade3 cover. At the time of the inspection, a clock was plugged
into the outlet that held the cover open. Although the outlet had a cover, it
is a spar4producing piece of equipment and is not dust-tight. (T. A64) A

dust-tight receptacle operates so that insertion of the atta t plug into the socket seals the area and the plug then has to be twisted in order to make contact with the source of electricity. (T. P65, B102; Dc. 3)

'Ihere was a concentration of dust in the packing room on the fixtures and the floan (T. A-9 7)

37. An attachment plug for the electric chain hoist located on the fifth floor of the mill was not of the type apr-roved for a d@ist-tight location.

(T. A67) The plug was plugged in and available for use. (lie employee works in this area about a half-nour per day. There was a light film of dust in the area. (T. A68, 103, E55)

38. CY the south wall of the roll floor, there is a 1--@plex outlet or receptacle which was not dust-tight and is a spark-producizig piece of equip-ment. P. moisture tester was plugged into the outlet. Tne roll floor contains machines used in the flour manufacturing process. 'Iahe ro.'Ll floor area was clean of dust although leaks are possible at times. (T. A68)

3 9. Mie moisture tester sbicti @s plugged into the outlet described in the preceding paragraph was attached by means of an attachment plug which is not of the type approved for dust-tight areas. (T. A68)

40. Pi sifter was also plugged into the outlet on the south wall of the roll floor, and it was connected with an attachment plug Out is iKk approved for dust-tight locations. (T. A6 9)

41. 'Rie hazarj which exists in regard to junction boxes is that if there is a concentration of dust in the box or conduit, it (-@d create or add to a fire or explosion. A short or a sparking could set the dust on f ire and this could travel the length of the conduit. (T. A7 0) l@ta@ant plugs and re-ceptacles create a small spark when used, and if there is arry accumulated dust i n th e area., a f i r e o r explos io n coul d be caused (T. P6 9)

42. A penalty was proposed for Item No. 3 of Citation lb. 2. The inves-tigator rated the severity at an E immause 6f tuhe possibility of burns and cuts from an explosion or f ire. He rated the probability at a 3 by assigning points in the categories of employee exposure, proximity to the hazard, and employee control. Because the E ratirxg is assigned an tBO.00 value, the total unadjusted penalty was t240.00. This was then reduced by the 40% credit for good faiun and history which resulted in a proposed penalty of tl44.00. (T. B28)

Ci tat ion 1, It em No. 5, - 2 9 C. F. R. 1910. 6 8(c) (5) (i i i)

43. Item No. 5 of Cdtation No. 1 alleged a violation of 29 C.F.R.

1910.68(c!) (5) (i ii) and described the alleged violation as follows:

Fliled to set the brake so that when the step passes over the limit switch the step will stop within 24 inches of the terminal landi ng on the 5th f loor f or the manlif t located i n the cleaning nouse

44. An endles s bel t manlif t i s a vertica 1 bel t km. ch runs between several floors of a facility and provides transportation for a person from one level to another. Tne belt contains a series of steps which the rider can mount in order to travel either up or do4s (T. A105-106, Ex. L) 'Ihe manlift located at Respondent 's facility traveled from Uie basement to the top of the eleva- tor. The belt is approximately 12 inches wide. Pk rider holds on to the belt by grabbing a cup located a chest level above Uie step, and steps off of the belt when he reaches the floor which is his destination. The speed of the belt is predetermined. The rider has access to an emercenc, stop switch which

j

is a rope Located at the side of the belt. (T. A107)

45. k limit switch is located 24 inches above the opening on the top f loor. @,e purpose of the limit switch is to stop the belt when a step reache sit if there is a person's weight on the step when the switch is passnh VKthout the switch, an employee could proceed o\7er the top of the belt and fall to the floor on the other side. (T. AIO 9) On th e dat e o f the inspection, the inspector stepped onto the manlift at the top floor, but the limit switch failed to stop the belt. Instead, the belt coasted to a stop apfroximately six feet above the top floor. (n AIOS-llO) ahE; inspector did not ride the lift up from the lower floor to sit if the switch would work properly. (T. A126-27) The inspector talked to the plant manager after the inspection and the plant manager stated that he had adjusted the brake so that it was stcyping at the right point. (T. A110)

46. With regard to the proposed penalty, the investigator rated the severity of a potential accident at a C4 which means that injury could result in some lost time or doctor treatment but not a long-term hospital stay. He rated the probability of an injury at 3 by giving a poini- for the areas of employee exposure, proximity to hazard and aqaoyee control. Since a C rating equals 440.00, the total unadjusted penalty was tl2O.OO. This was then re- duced by a 4 0% credi t whi ch lef t the proposed penalty o f $7 2.0 0. (T. B2 3)

Citation @). 1, Item No. 6 - 29 C.F. R. 1910.68(b) (11) (ii) (a)

47. nie violation of 29 C.F.R. 1910.68(b) (11) (ii) (a@) alleged at Cita-
tion No. 1, Item 6, was described in the citation as follows:

> @iled to provide at least five feet head clearance between the center of the head pulley shaft and any ceiling obstruction at the top of the manlif t located in the cleaning house.

48. 'rhe distance between the center of tne head pulle,y shaft located at the top of the belt manlift and the ceiling of the cleaning house is 33 inches. The purpose of providing a five-foot clearance is to protect a rider who was heading towards the top of the belt after the failure of the limit switch. (T. Alll-112) The investigator suggested three methods of connecting the problem: (1) raise the ceiling; (2) take the top floor out of service,- and (3) apply for a variance. (T. A127)

Ci tation No. 1, It en No. 7 - 2 9 C. F. R. 1910.6 8(b) (10) (i v)

49. Item No. 7 of Cltation No. I alleges a violation of 29 C.F.R.

1910.68(b) (10) (iv) and described the alleged violation as follows:

> Ftiled to provide guard rails with a staggered railing or self-closing gates to guard against a person getting under the a@ cending step on the manlift located in the cleaning house basement.

50. The lower end of the belt manlift is anchore--d in the basement of the cleaning louse. In tie area of the basement where the nolnlift is located, there are two doors in close proximity to the manlift. M@affic between the 6oors would tare. a passerby near the manlift. 'Ih e manl i f t i s ungua rde d i n that there is no railing or gates which would prevent a passerby from coming into contact with the manlift. 'Ihe hazard involved would be the danger of an employee being struck by a step, either on the descending or ascending side of th e iranl i f t shoul d h e com e int o contac t wi th i t . (T. k 12 -1 13 4)

Citation No. 2, Item No. 5 - 29 C.F. F- 1910.68(b) (8) (i)

51. Item 5 of Citation No. 2 alleges a violation of 29 C.F.R.

1910.68(b) (8) (i) and describes the violation as follows:

> Fbiled to protect the entrance and -die exit to tl-.ie manlift from the maintenance platform located between the first and second floor of the cleaning house with staggered guard rails or by a self-closing gate.

52. P, maintenance platform is located adjacent to the manlift between tne

first and second floors of the cleaning house. The platform is aperoximately

10 feet from the ground. (T. A141) 'nMe platform at the entrance lacks a

guardrail or a maze or a swinging gate. 'Me hazard would be the possibility

of falling or of being hit by a step on the manlift should an euplayee lean

c-,t from the opening where it is not guarded. (T. A114-115) 'Ih e cond i t i on could be abated with a swinging gate. Mie platform is used by a maintenance person once a week. (T. Al 17, 131) The manlift was in use by employees on the day of inspection. (T. A118)

53. A penalty was proposed for Item No. 5 of Citation No. 2. The severity of a potential injury was rated at. D because if there was a fall, it would be one of approximately ten feet which could result in a broken arm or a similar injury. Mie investigator rated Elie probability at@ a 3 by assigning points in the categories of employee exposure, proximity to the ha@, and employee @Dntxol. Since a D is assigned a $50.00 value, the resulting unad- justed penalty was tl8O.OO. This was then reduced by the z@C% credit for good faith and past history which resulted in a final proposed penalty of $108.00.

54. In June of 197t the Respondent's Minneapolis mill was advised by the federal C)SIA program that they interpreted 1910-68(b) (3) to mean that the design requirements of 1-910.68 apply only to man-lifts installed after the effective date of Elie standard. (Ex. K; 97. B12 3) (In Jinuaill 31, 1978, the federal OEtiA program issued a program directive which sought to clalrify when th e genera 1 dut y c laus e shoul d b e used , whe n 2 9 C. F - R - 1910.6 8 i s i nappl i c a- ble because the manlift in question was installed prior to August 27, 1971, the effective date of tne standard. (Fx . J) @ e @Fe rt,@n t o f Labor and I@ duso, has interpreted 1910.68(b) (3) t-c) mean that- older elevators need not meet tne ANSI design requirements, but- must 'meet the OEIE,R requirements of 1910. 6 8. The Departuent has been issuing citations consistent with its interpretation for the past several years. (T. A139)

Ci tat ion No. 2, It ern lb. 1 @ 2 9 C. F. R. 1910. 3 09(a)

55. Item No. 1 of Citation No. 2 alleges a violation of the 1971 %tional El eco@ cal Code, Article 110-17 (a) , as incorporated into 29 C.F.R. 1910.309(a) - 'Ihe violation was described as follows:

Foiled to guard live parts of electrical equipment operating at

50 volts or more, as follows:

(a) electric panel located in the lab.

56. !Vi electrical panel is located in the lab room on the south wall 1 220 volts of current come into the electrical panel. At tl-ie time of the irr--

spectioro Uae top half of the panel inside the door was rn:Lssing, leaving an

open area of approximately 11. x 12 inches which 'nad the wiring and contacts exposed. (O A143; Ex. A) The panel contains circuit breakers. (T. Al 5 4) The door w@as closed on the panel at the time of the inspection. (T. A14 6) One employee works in the lab. Normally, the only people opening the panel would be electricians installing -a new circuit. (T. B7 3) 9he one employee would not normally have a reason to use the panel (T. B74), but the circuit breakers for the lab are contained in the panel (T. E75), as are the circuit breakers for the office area. (T. - B7.8) @ould an employee come in contact with the e.@sed,area of the panel,- an electrical burn or electrocution would be possible. (T. A145)

57. A penalty was proposed for Item No. 1 of Citation RD. 2. The invea- tagator rated the severity of the potential injury at an E !since he concluded Enat an accident would be quite severe. He only assigned one point for proba- oility in the area of employee control. Since an E rating equals $80.00, this was the resulting unadjusted penalty. This was then multiplied by the 4c% credi t and the proposed penalty arrived at t48.OO.

Citation NTc). 2, Item%. 6 - Minn. Stat. 182.653, subd. 2

5 8. Item No. 6 of Citation No. 2 alleges a violation of the general duty

clause contained at Minn. Stat. 152.653, subd. 2, and described the viola-

tion as follows:

> Ehplono failed to furniti to each of his employees conditions of employment and a place of employment free from recognized hazards that were causing or were likely to cause death or seri- ous injury to his employees; specifically, employer failed to provide guard rails at the top of the metal bins from tr,e galley (sic) emergency exit to the caged fixed ladder that is used as a second means of egress, and to]provide at guardrailed platform between the bins.

59. Ranning across the top of the steel bins is a metal enclosure called a gallery 'which houses a boriawaal auger with spouts attached v4A(la enter eadn bin for transfer of the product. The metal bins are standing approxi-

notely 6 to 8 inches apart from each other at the closest point and the top of the bins are slightly sloped. (T. B5, 78) The gallery 'has an emergency exit door at its end with a small platform. A fixed caged ladder is attached to the last bin and extends 3 feet to 42 inches above the roc)fline of the bin.

In order tc) cross from the gallery exit to the caged fixed ladder in the event

of an emergency, an employee would have to travel across -the opening between two bins. 'Ihe opening 'nas no guardrailed platform nor are there any guard-rails on the top of the metal bins. (T. B6) 7he distance from the gallery exit door to the f ixed ladder is approximately 15 to 20 feet. (T. BB) No employee s regularly work i n thi s area, but i t would be used for maintenance cx as emergency exit. (T. B13-14) A walkway did exist between two of the other bins in the line. (T. B8) Other grain elevators have employed cables nzming from a gallery to f ixed ladders or guardrails. (T. B9-10) The investigator was aware of three other grain facilities with similar cables or guardrails, but admitted that others did not have such guardrails. (T. B16)

60. P, proposed penalty was calculated for the general duty clause viola-tion in li--em No. 6 of Citation No. 2. 'Ihe investigator assigned an F rating for severity- because if an employee fell from the roof level to the ground, t'ne accident would be fatal. 'Me probability factor was rated at only 1 for the categorl, of employee control however, since there would 'i)e a low number of people who would be exposed to such an accident. (T. B2 9) Since the F is assigned a value of tlOO.00, that was the resulting unadjusted penalty. After applying the 401 credit, the resulting f inal proposed penalty was 160.00.

Based 'upon the foregoing Edndings of @ct , the Fbaring @ner makes the f ollowing:

CONCLUSIONS OF L7VI

1. @at the Minnesota Occupational Safety and Fbalth Ftview Board and the Bearirg li(aminer have jurisdiction herein and authority to take the action proposed pursuant to Minn. Stat. 182.661, subd. 3, 182.664, and 15.052, subd. 3 (1980).

2. 'niat the Board gave proper notice of this hearing and that the plainant and the Board have fulfilled all relevant substantive and procedural requirements of law and rule.

3. 7hat the Respondent is an employer as defined by Minn. Stat. 182.651, subd. 7 (1980).

4. 2 9 C - F - R. 1910-151 (c) provides that:

Vhere Sie eye or body of any person ray, be exposed to injurious corrosive materials, suitable facilities for quick drenching or

flushing of the eyes and body shall be provided within the work area for immediate emergency use.

5. That the Respo@ent was in violation of 29 C.F. R. 1910.151(c) on the

date of inspection.

6. 'Die lbtional Electrical Cbde (Ngl 1971 at Article 502-4, as incor-

porated int-.o 29 C.F.R. 1910.309(a) , provides as follows:

502-4. 'Wirirg t4ethods. Hiring methods shall conform to the
following:

(a) Class II, Division 1. In Class II, Division 1 lc>c@ tions, threaded rigid.metal conduit or @e Ml cable with termi- nation fittings approved for the location shall be the wiring method employed. Type Ml cable shall be installed and supported in a rnartier to avoid tensile stress at the termination f ittings.

(1) Ftttings and Boxes. EltOngs and 'boxes :shall be
provided with threaded bosses for connection to conduit or cable terminations, shall have close fitting covers, and shall have no openings (such as holes for attachment-screws) through which dust nacjit enter, or 43xough which sparks or burning material might escape. @ttings and boxes in which taps, joints or ter- minal cyomections are made, or which are used in locations where ,ousts are of an electrically conducting nature shall be dust-ignition proof and approved for Class II locations.

(2) FLexible Connections. fliere necessary to employ flexible connections, dust-tight. flexible connectors, flexible metal conduit with approved fittings, liquidtibht flexible metal conduit with apr-roved fittings, or flexible cord approved for extraaiard usage and provided with bushed fittings shall !De used, except that where dusts are of -an electrically conducting nature, flexible metal conduit shall not be used, and flexible cords shall IDe provided with dust-tight seals at both ends. An additional conductor for grounding shall be provided in the flexible cord unless other acceptable means of grounding is pro- viden there flexible connections are subject to oil or other corrosive conditions, the insulation of the conductors shall be of a type approved for the condition or shall be protected by inewis of a suitable sheath.

(b) Class IL Division 2. In Class II, Division 2 loca- tions, rigid metal conduit, electrical metallic tubing, or @e !ql, NIC, ALS or SNM cable with approved termination fittings or dust-tight wireways shall be the wiring method employed.

(1) ldireways, Fittings and Boxes. Wireways, f ittings
and boxes in which taps, joints or terminal connections are made, shall be designed to minimize the entrance of dust, and: (1) shall be provided with telescoping or close fitting covers, or other effective means to prevent the escape of s]Darks or

burning material, and (2) shall Yonve no openings (such as holes

for attachment screws) through which, after installation, sparks or burning material might escape, ox- through which adjacent combustible material might be ignited.

(2) Flexible ODnnections. VW'tnere flexible connections are necessary the provisions of Section 502-4(a) (2) shall apply .

7. Class II locations are defined by the INBC at Article 500-5 as follows:

500-5. (lass II Locations. (lass II locations are those which are hazardous because of the presence of combustible dust. Class II locations shall inclu3e tne following:

(a) Class II, Division 1. Locations (1) in which c@ bustible dust is or may be in suspension in the air cc>ntinuously, intermittently, or periodically under normal operating condtions, in quantities sufficient to produce explosive or igoitible mixtureen (2) where mechanical failure (Dr abnormal operation of machinery or equipment might cause such mixtures to be produced, and might also provide a source of ignition through simultaneous failure of electrical equipment, operation of r-r@ tection devices or from other causes, or (3) in which dusts of an electrically, conducting nature maybe present

[This classification usually includes the workim areas of grain handling and storage plants; rocms --orr-- taining grinders or pulverizers, cleaners, graders, scalpers, open conveyors; or gxmts, (Inri bins or hoppers, mixers or blenders, automatic or hopper scales, packing machinery, elevator heads and boots, stock Distributors, dust and stock collectors (except all-metal collectors vented to the outside) , and all similar dust producing machinery and e4uipment: in grain processing plants, starch plants, sugar pulverizing plants, malting plants, hay grinding plants, and other occupancies of similar nature; coal pulverizing plants (except where the pulverizing equipment is essentially dustaight); all mxting areas where metal dusts and pcoders are produced, Ipmrocessed, 'ha--Oled, pack@l or stored (except in tight containers); and all other similar locations where combustible dust may, under normal operating conditions, be present in the air in quantities sufficient to produce explosive or ignitible mixtures.

Cbmbustible dusts which are electrically nonconducting include dusts produced in the handling and processing of grain and grain products, pulverized sugar and cocoa, &tied egg and milk powders, IDul-%jerized spices, starch and pastes, potato and w(@ flour, oil meal from beans and seed, dried bay, and other organic materials which may produce combustible dusts when processed or handled. E2-ectric@ly (-,on-

ducting nonmetallic dusts include dusts from E)ul-verized coal, coke and charcoal. Dusts containing magnesium r aluminum are particularly Ivizardoas and every precaution must be taken to avoid ignition and explosions

(b) Class II, Division 2. locations in which combustible dust will not normally 'ne in suspension in tne air, or will not be likely to be thrown into suspension by the normal operation of eqkpnent or apparatus, in quantities sufficient to produce explosive or ignitable mixtures, but (1) where deposits or ao-cumulal--ions of such dust may loe sufficient to interfere with the safe dissipation of 'heat from electrical equipment or apparatus, or (2) where such deposits or accumulations of dust on, in, or in the vicinity of eleoxical equipment might Ix? ignited 10, arcs, sparks or burning material from such equipment.

[Locations where dangerous concentrations of sug-P(anded dust would rxdt be likely, but where dust ac!cu-mulations might form on, or in the vicinity of e:Lec-t.rical equipment, would include rooms and areas c,,on-taining only closed spouting and conveyors, closed bins or hoppers, or machines and equipment from Mich appreciable quantities of dust would escape only under abnormal operating conditions; rooms or areas adjacent to locations des=Abed in Section 500-5(a) , and into which explosive or ignitable concentrations of s;us-pended dust mi@t be communicated only under abnormal operating conditions; rooms or areas where the foi-ma-tion of explosive or ignitable concentrations of .3u@ pended dust is prevented by the operation of effective dust control equipment, warehouses and shippi@ room where dust r-roducing materials are stored (Dr 'handled only in bags or containers; and other similar 1(:)ca-t ion s. I

S. That the Respondent was in violation of NE)C 1971, ;xticle 502-4(b) (2)

(Dn the date of inspection. @

9. That the $72.00 penalty proposed by the Complainant is appropriate and

reflects a consideration of the factors set out at Minn. Stat. 182.666,

s ubd. 6.

10. Moat the Respondent was in violation of NE)C 1971, l@ticle 502-4(b) (1)

on eie date of inspection.

11. 'rnat the violation of Article 502-4(b) (1) is serious within the

meaning of Minn. Stat. 182.651, subd. 12.

12. '!'hat the $192-00 penalty proposed by the; Complainant is; appropriate

mid reflects a consideration of the factors set out at Minn. Stat 182.666,

s ubd. 6.

13. NEC 19'a, Aoicle 502-13, as incorporated into 29 C. F. R.

1910. 3 09(a) , provides as f ol lows:

502-13. Feceptacles and Attachment Plugs.

(a) Class II, Division 1. In Class II, Division loca-tionen receptacles and attachment ydugs shall be of the type providing for connection to the grounding con3uctor@ of the flexible cor5, and itzll be dust-ignition@oof approved for Class II locations.

(1)) Class II, Division 2. In Class II, Division 2 loca--tions, receptacles and attachment yaugs shall be of the type providing for connection to the grounnding conductor of the flexible oord and Efell be so designed that connection to the supply circuit cannot be made or broken while live I:,arts are exposed.

14. That the Respondent was in violation of NEC 1971, Article 502-13(b) ,

on the date Of inspection.

15. That the violation is serious within the meanii.@ of Minn. Stat.

182.651, subd. 12.

16. That the penalty of tl44-00 proposed by Complainant is appropriate

and reflects a consideration Of the factors set out at Minn. Stat. 182-666,

subd. 6.

17. Tn at 2 9 C. F. P- 1910. 6 8(c) (5) (i i i) provides a s f ollows:

Cu t-of f int. Mne initial limit step switch device shall @l: 1: PO function so that the manlift will Ix; stopped before the loaded step has reached a point 24 inches above the top terminal landing.

18. That the Complainant has failed to prove la, a preponderance of the

evidence that Fespondent was in violation of 29 C.F.R. 191.0.68(c) (5) (iii) on

the date of inspection.

19. That the penalty of t72.00 proposed by Complainant is appropriate and

reflects a consideration of the factors set out at Minn. Stat. lB2.666,

subd. 6.

20. That 29 C.F.R. 1910.68(b) (11) (ii)(a) provides as follows:

> Pulley clearance. (a) 'Nere Kudl be a clearance of at leasi-5 f eet between the center of the head pulley shaft@ and any ceiling obstruction.

21. That the Respondent was in violation Of 29 C.F.]R. 1910.68(b) (11)

(i i) (a) on the date of the inspection.

22. 2@) C.F.R. 1910.68(b) (10) (iv) provides as follows:

Guardrails. MD guard against persons walking under a desce@hiing step, the area on the downside of the manlift shall be guarded in accordance with sOTmrag7alii (8) of this paragraph. Tb guard against a person getting betveeeri Uie mounting platform and an ascending step, the area between the belt and Une platform shall be protected by a guardrail.

29 C. F. P- 1910.68(b) (8) (i) provides as follows:

Guardrail requirement. The entrances and exit at all floor landings affording access to the manlift shall be guarded by a maze (staggered railing) or a handrail equipped with self-closing gates.

23. @at the Respondent was in violation of 29 (nF% R. 1910-68(b) (10) (iv) on the date of the inspection.

24. 'Diat the Respondent was riot in violation of 29 C.F.R. 1910.68(b) (8) (i) on the date of inspection.

25. 'niat Article 110-17 of the liBC 1971 as incorporated into 29 C.F.R. 1910.309(a) provides as follows:

110-17. Guarding of LLve Parts. (lbt more than 600 Volts)

(a) Except as elsewhere required or permitted by this Code, live parts of electrical equipment operating at 50 volts or more shall be guarded against accidental c6ntact by approved cabinets cDr other forms of approved enclosures, or any of the following means:

(1) By location in a room, vault, or similar enclosure which is accessible only to qualified persons.

(2) By suitable permanent, substantial partitions or screens so arranged that only- qualified persons will have access to the space within reach of the live parts. Any openings in such partitions or screens Nodl be so sized and located that persons are not likely to come into accidental contact witli the live parts or to bring conducting objects into contact with them.

(3) By location on a suitable balcony, gallery, or platform so elevated and arranged as to exclude unqualified persons.

(4) By elevation at least 8@eet above the floor or other working surface.

(b) Ili locations where electrical equipment would be exFosed to #laical damage, enclosures or guards shall be so arranged and of such strength as to prevent such damage.

(c) EDhi tr s to rocms and otuher guarded locations co@ tainiry e)T*sed live parts shall be marked with conspicuous %arning signs forbidding unqualified persons to enter.

26. That the Respondent was in violation of Article 110-17(a) of the NBC 1971 on the date of inspection.

27. 'rnat tne violation was serious within the meaning of Minn. Stat. 182.651, subd. 12.

28. 'Inat the penalty of t48-00 proposed by the Oomplainant is appropriate .mid reflects a consideration of the factors set out at Minn. Stat. 182.666, subd. 6.

2 9. rMiat the violations of the standards cited above also constitute a violation of Minn. Stat. 182.653, subd. 3.

30. Minn. Stat. 182-653, suhd. 2, provides as follows:

Etch employer shall furnish to each of his employees conditions of employment free from recognized hazards that are causing or are likely to cause death or serious injury or 1-iarm to his e@ ployees.

31. That the CDoplainant has failed to prove by a preponderance of the evidence that the Fespondent was in violation of Minn. Stat-. 182.653, subd. 2, on the date of inspection by reason of its failire to provide guardrails at Uie top of its metal bins and a guardrailed platform between the bins.

32. That the Complainant has f ailed to prove that the absence of a guard- rai 1 and platform atop the metal bins in question is a hazard recognized wi th- in the grain milling industry.

33. The installation of guardrails arO a guardrailed platform is a feasible safety measure.

34. ND specific M09i stantma exists which would apply to the situation referred to in Cbnclusians NDs. 31 and 32.

35. That the above Gonclusions are based upon the reasons set out in the Memorandum which follows and which is incorporated by refereice.

Based upon tne foregoing Conclusions of Law, the Hearirrg Examiner makes the following:

ORDER

I T I S F,:E REBY ORDE@ D THA T:

1 - That the citations and penalties cited in Conclusions Nos-co &-12, 14-16, 21, 2 3, and 26-2 8 are hereby af f irmed.

2. That the citations and penalties cited in Conclusions NDs. 18, 19, 24, and 31-34 are hereby dismissed.

3. latat the Respondent CorAgra, Inc. shall forthwith]?ay to the Cbmmi@ sioner of Iabor and Industry the sum of $456.00.

Dated: Au@just 1981.

CEO
State Hearing Elaminer

MEMORAND124

The issue to be resolved in regard to the equipment located in the lab room is Whether or not the equipment constituted "suitable facilities for (4,c.ic')< drenching or flushing of the eyes for immediate emergency use".

@e Purulent maintained a bottle of neutralizing solution, a sink and a shower in the lab room. The evidence submitted by the Complainant has demon-strate6 that a neutralizing solution is not a suitable item of equipment to be use& for chemical burns of the eyes involving sulfuric acid. 'Ihe literature states that a neutralizing agent may, in fact, increase the eye damage. Neither would a 12-ounce bottle provide very mudn liquid for flushing the eyes even if it bad contained a Froper solutiorn '9nhe overhead pull chain shower located in the lab would ordinarily be used in the case of a chemical burn of the body - Ihe testimony, of the investigator is logically persuasive in r e a son i ng th a t i f a n e mployee 1 eaned back t o a I low the s bower t o f a 1 1 i nto h i s eyes, the corrosive material might very well be retained in the eyes rather than flushed out. Maintaining such a]posture and 'Keeping the eyes open against falling water would obviously be difficult.

'Ihe sink alone would not provide an adequate remedy in the case of eye damage. thd the sink been equipped with a hose i4hidn would reduce pressure so that it could be used for flushing the eyes, this would have been adequate. The sink alone, however, would not permit a single employee to flush his eyes. A portion of the literature suggested that pouring water from a clean container might be a suitable means of flushing the eyes as long as copious amounts of water were available. In the case of a lab situation where there is only one employee, 'however, this method is not feasible since the water would have to be carefully pxxed on to the bridge of the victim's r)ose by a second person.

The record herein establishes that one effective method for flushing the eyes would be the basin-type eye wash which projects a stream of water upward t o e ach e, .@e and which is operated with a foot pedal. An alternative would 'be a hose and nozzle device vht(An could be attached to the sink and could be easily operated by one employee. The literature and the irvestigator's testi-mony, make it clear that a large amount of water must be available for a flushing of the eyes which means at least a 15-minute supply. The Repondent complains that the 15,dnute time limit is not contained in the standard it-self and that it could, therefore, have known that this was required. The standard does, however, require the Fespondent to determine, in an objective manner, what are suitable facilities for flushing the eye" Ih e Re gxxoent cannot claim to simply rely upon its IVsiciai's advice. li review of materi-als from manufacturers or National Safety Council literature would have given tYe Beqnndeent the knowledge that its neutralizing solution was not a good answer to this problem and would have further informed him that copious anmmts of water were necessary in order to successfully treat a chemical burn. Further reflection on how a single employee with a chemical burn would be able to successfully use a water supply tmxdd have caused the lbspondent

to conclude that the shower and sink may have been adequate for burns on the
body, but notw for a chemical burn of the eye. 'Ihe Fespondent cannot w
aggregate three pieces of equipment in the lab room, which are each in th@
selves not completely effective, into one effective method.

In order to prove the electrical violations which the Complainant has
alleged, it must first demonstrate that the electrical fixtures were located
in a "Class 2, Division 2" area as defined by, the National Electrical Code.

As the definition set out in the Conclusion No. 7 indicates, a Class 2, Divi-
siori 2 area is one in Which dust will not normally be in suspension in the
air, but Aihere deposits or accumlulations of such dust "may be sufficient to
interfere with the safe dissipation of heat from electrical equipment or ap-
paratus or (2) where such deposits or accumulations of dust on, in, or in the
vicinity of electrical equipment might be ignited by arcs, sparks or burning
material from such equipments This definition can be contrasted with that
set out for "Class 2, Division 1" Atch describes a location in v4lcb cou-
bustible dust is or may be in suspension in the air. TTi e c nts to the
C:lass 2, @.vision 2 definition, which are not an enforceable part of the code,
indicate that the definition includes areas where dust accumulations might
form near electrical- equipment, but Where appreciable quantities of dust would
be abnormal.

T'ne record demonstrates that the Respondent has a good 'housekeepirx3, pr@
@am which cleans up the dust which does acoxndate in the facility and which
takes care of spills which occur on occasion. The investigator was frank in
describing the entire facility as fairly clean. ltoover, the record is also
clear that there was accumulated dust throughout the facility, that spills did
occasionally occur and that some accumulation of dust was a normal incident of
the operation of a grain handling facility and flour manufacturing mill. The
Firydirigs. also describe the investigator's observations of the accumulation of
dust, generally described as a light filin, in regard to tY@e individual loc@
tions where the electrical equipment in question was located.

The Respondent is essentially arguing that since it maintains a good
housekeeping program Oticti normally permits only a light concentration of
grain or flour dust in its facility that it, therefore, should not be included
as a Class 2, Eivisiori 2 area. &3ch a position does not, however, square with
the language of the NBC which speaks in terms of dust accumulations which "may
be" sufficient or "tight be" ignited by arcs or sparks. The Complainant is

not obligated to prove the existence of arcs, sparks or burning material or
that the dust located in the Pespondent's facility is, in fact,
stible.
The thrust of the Class 2, Division 2 definition is to protect against ab-
normal occurrences such as an electrical fire which might ignite accumulated
dust inside a junction box or a broken conduit. The Complainant can obviously
not prove that such abnormal occurrences are or will r in the
Respondent's

facility. Mae Cbmplainant has shown that there normally is a light dust lo-
cated on equipment throughout the facility and that spills will occasionally,
increase the concentration of dust. 7his showing, together with the descrip-
tion of the dust condition whicn the investigator encountered in regard to
individual violations suffices to demonstrate that Class 2, Division 2 loca-
tiom3 are involved within the meaning of the NEC.

Mae investigator found and cited five instances of broken flexible conduit
which included two instances of nonapproved termination fittings. Mae Respon-
dent argues in its defense that the fact that the conduit- is broken or not
tight-f itting does not present any hazard unless the insulation inside the
conduit is also broken and the wiring therefore exposed. In each of the five
instances cited by the investigator, the insulation was apparently not
broken. Mae investigator testified, Innoever, that an accumulation of dust
inside the conduit but outside the insulation might preven't the heat from the
elec&Acal wiringi from properly dissipating. It is also obvious, however,
that one of the main purposes of flexible metal conduit is to protect the
wiring from a blow of any kind. If the flexible metal conduit is broken or
damaged, the wiring is then protected only by a strip of rubber insulation.
Lhe NEC cannot be read to approve the use of flexible co@ui.t which is damaged
or broken. If the conduit is unnecessary, it- would not be required by the
Cbde.

The citations in regard to the junction boxes cite 11 different locations
- n One facility where the investigator believed that the junction boxes which
were being used did not conform to the NEC requirements. The NEC requires
that the junction box minimize the entrance of dust and !3ha-11 not have any
holes such as those for attachment scxew" qhe junction boxes in question
contain knockouts, however, the knockouts were all apparently in place. The
investigator believed they were a problem because they could be easily re--
moved. The junction boxes all contain screw holes which would permit the
entrance of dust.

Alth@ the investigator did not open eadn junction box to determine that it contained taps, joints or terminal connections, he testified that some of the boxes .qould contain joints or terminal connections and some would possibly not. Mae Fespondent seeks to show that One junction boxes which are located

in ceiling locations do minimize the entrance of dust because of their loca-
tion on the ceiling. The ceilings range from 12 to 30 feet from tne floor.
Moe screw holes are facing downward. k the absence of a malfunction, there
would not normally be any sparks or arcs from the junction boxes. Art icle
502-4(b) (1) crovides, however, that in addition to minimizing the entrance of
dus" the boxes shall have no openings thr@ which sparks might escape. @e
junction boxes in question clearly do not cagey with @it provision. Al-
though tn(@ Respondent urges that there is no dust in the vicinity of the
ceiling junction boxes, the record supports the conclusion that an accident
can cause dust to rise in the air above the working area.

The investigator cited five areas of the facility for a failure tc) provide
electrical receptacles and attachment plugs approved for Class 2, Division 2
locations. Essentially, the NEC provides that the receptacles and plugs must
be designed so that the connection to the electrical circuit cannot be made or
broken while live parts are eqmse5. Mie attachment plugs and receptacles
beinct used by the Respondent create a small spark when used. Approved equip-
ment operates so that. tie insertion of One attachment plug into the socket
seals the area and the plug then has to be twisted in order to make contact
with the source of electricity.

7ne Respondent's defense is that the Complainant has not snown that tnere
is dust near each receptacle or plug to create a hazard. 'Ihe testimony did,
h@,ever, establish in two of the areas thai there was an accumulation of
dust . It has also been shown that there is generally an accumulation of dust
throughout the facility and that leaks can and do occ-ur throughout the f@
Cility on occasiorw Atta t plugs and receptacles that create a small
spark when used can cause or contribute to a fire if there is accumulated dust
present. A12yugh the Respondent Yes mentioned the small distance that a
spark can travel the 14BC 'has already made the determination that the exposure
of live parts is to be Frohibited.

The first question to be resolved in regard to the marll i f t violations is

whether or not the manlifts constructed prior to adoption of the OgiA standard
in question were c3randfathered out of the coverage of the standard. Sec-
tion 1910.(@8(b) (3) provides that all new manlif t installations after the ef-
fective date of the standard shall meet the design requirements of ANSI "and
the requirements of this section". Tie Respondent sees this language as

exempting any manlift installed before 1971, which is the case with the Respondent's manlift in Fergus Falls. The Respondent presented a 1974 letter from the fbderal OSHA Program which advised the Respondent that a @ift in service for 47 years was exempted from "the design requirements in 1910.68". 'Iherefore, -a variarce was not required for the Minneapolis manlift in question. A 1968 program directive issued by the Federal OSHA advised inspectors as to when the general duty clause should be employed for manlifts installed before 1971, where 1910.68 would be inapplicable.

Mne Ctoplainant states that it has always interpreted thie; section to exempt older manlifts only from the ANSI standards, but not from the requirements of @- 1910.68. The Cbmplainant points out that the alleged grandfather clause appears under the title, "Design Requirements", as opposed to the "General -@irements - Ppplication" section. The Cbmplainant is, of course, not necessarily bound to follow the federal interpr(E!tatiori. It do-es not appear logical, however, ttat- a grandfather clause intended to exempt all pre-1971 manlifts from the requirement of a section would be buried in a sectiori called "Design Requirements;". 'Ihe language is cenninly Ponsed in a peculiar fashion if its intent is to grant such an exeqkion The most reasonable construction of 1910.68(b) (3) is simply that 21 1 new manlif t i rr-stallations must meet the requirements of 1910-68 and the ANSI standards. It is also reasonable to conclude that older manlifts do not have to meet the ANSI standards, but it requires a leap from logic to conclude that the older ma-nlifts are also completely exempted from tne section. Ntst of the requirements in 1910.68 such as the guardrail requirements can be easily applied to manlifts installed before 1971, and the older manlifts as well as the new ma@ lifts would benefit from those provisions. It is, therefore, concluded that the Cbmplainant has correctly interpreted 1910.68(b) (3).

The first citation in regard to the manlift involves the functioning of a limit switch or break located above the top floon Ihe inspector stepped on

to the ma:nlift step from the top floor and the manlift failed to stop but coasted to a stop approximately six feet above the top floor. 'Ihe Respondent suggests that had the inspector ridden the manlift from the floor below up to the top floor that the switch would then have worked properly. It i s co@cluded that the manner of testing 11, the inspector was not appropriate in order to demonstrate by a preponderance of the evidence that the limit switch

was not in proper operating order on the day of Une inspection. The record is not clear as to how far the step was above the top floor when the inspector placed his weight upon it. Mie Respondent's corporate safety director indicated that the switch would operate differently when the step is loaded below the top floor. Tne investigator is obligated to test a device such as this in the sane manner that an employee would use the device.

Tne investigator also cited the manlift for a failure to provide a five-foot clearance between the top of the manlift and the ceiling. That is clearly Une case. The Fiespondent states that the suggested solutions of raising the ceiling or not using tne manlift to the top floor are impractical. Tie lbspxaent has not attempted to (Again a variance from the ODmplainant in regard tc, this requirement. It may be that another safety device in addition to the 1imit switch would permit a variance to be granted -

'Me investigator also cited the facility for a f@ailure to place a guardrail or gate around -Oie base of Uie manlift in the basement area. Both the ascending and descending steps present a hazanl to passersty. The Respondent contends that idie installation of a guardrail (Dr gate would not solve the problem but does not offer a convincing reason for this conclusion.

Tie entrance and exit to the maintenance platform between the first and second floors of the cleaning house adjacent to the manlift was cited for not having any guardrails or gates to protect the entrance or exit. An employee performing work on the platform could fall through this opening or be struck by a step if he was leaning over.

@e standard under which this violation was ci.ted refers, however, to floor landings. The standards seem to make a distinction between floor landings and emergency landings, which are required when there is a distance of 50 feet or more between floor landings. The requirement for emergency Landings as contained at 1910-68(b)(6)(v) is that the emergency landing shall be co7pletely, enclosed with a standard railing and toe board. The standard also provides that a maintenance platform may serve as an emergency

landing and must then be provided with standard rail-ings and toe boards. A
fair construction of the standards, therefore, is that a lesser stantard is
set for maintenance platforms such as the one in question. The investigator
admitted that placing a swinging gate would make it awkward to enter the pla&-
form. li lesser standard for maintenance platforms @d be justified by the

lesser access to the area by employees as compared to a floor landing. The C,omplainar@t has failed to prove that tne platform in question was a floor land i ng -

The electrical panel located in the lab room was cited for a failure to guard live parts. The door of the panel was closed at the time of the inspec- t ion, however, and when it was opened, an area of the panel was not covered so that the wiring and contacts were exposed in an area of approximately one square foot.

The Respondent contends that the panel box was enclosed as required by the !TEC standard since the panel door was shut and it is located in a room where only one employee works. The purpose of the enclosure, however, is to prevent employees from accidentally contacting energized parts. The electrical panel box in question contains circuit breakers controlling lictts in at least the lab room and the offices. It is reasonable foreeable that employees would open the panel to check the circuit breakers in the event of an electrical failure or same other r-roblem. The enclosure provided must be one which guards live parts against accidental contact. It cannot be assumed that an employee would never open the electrical panel. lbi- can the Respondent take advantage of the provision of the NE)C which allows location in a room acces- sible only to qualified persons. Although an electrician mi@-it be qualified to liamidle; such an exposure, it is clear that any employee could enter the laboratory and that the one employee who did work there full-time had no par- tic,,)Iar expertise which would qualify him to use the electrical panel safely.

7bd Breihari Electric Cb,pany, OSHAPC Unket ND. 12459, Sept-. 7, 1976, 4 ORIC 1661, which involved an electrical contractor whose employees (consisted of seven electricians and two secretaries, is easily distinguished -

The investigator found a general duty clause violation in the failure of the Respondent to provide guardrails at the top of its metal bins and to pro- vide a guardrail platform between two bins. Tne Complainant has shown that a hazard exists at the workplace and that an accident should it occur would be

serious since a fall from the metal bins would likely be fatal. Tne installa-
tion of guardrails and a platform has been shown to be zi feasible safety
measure.

The ODmplainant has, however, failed to offer sufficient evidence to show
that Aie condition which existed to:; a recognized hazard. The @lainant's

testimony consisted of the investigator's statement that he ',,)ad observed three other grain elevators where guardrails were used in a similar situation. 7he investigator testified that in other elevators there may or may not 'nave been guardrails in existence. Generally, a recognized hazard is a condition which is known to be hazardous taking into account the standard of knowledge in the i n3ustry. National Realty and Construction Co@y v. O@FC, 489 F.2d 1257 (D.C. Cir. 1973) (n. 32). @ch general testimony relating to a few similar situations in whicñi the suggested Temedy has been employed is insufficient to establish that One milling industry generally recognizes a hazard to employees in the situation. See, Southern Ohio Buildipg Systems, Inc. v. O@, - F - 2d (6th Cir. 1980, case no. 79-3352 (1981 OaM 1925,429) and GbnAgra, Inc., 1979 OSHD 124,128. Neither nas the Complainant established actual knowledge cl a hazard on the part of the Fespondent through proof of prior citations, warnings to employees, work rules about the area in question, or similar evidence. Vy Lactos Laboratories, Inc., 1973-74 ()SHr rl7,573 (8th Ci r. 1974); Varion Stephens, dba Oiapran & Stepnens OD. , 1977-78 OSID 521,802. Ihe respondent's plant manager and corporate safety director denied knowledge of the existence of a hazard. Tnere is insufficient evidence in the record to support the conclusion that a recognized hazard existed.

G.A. B.